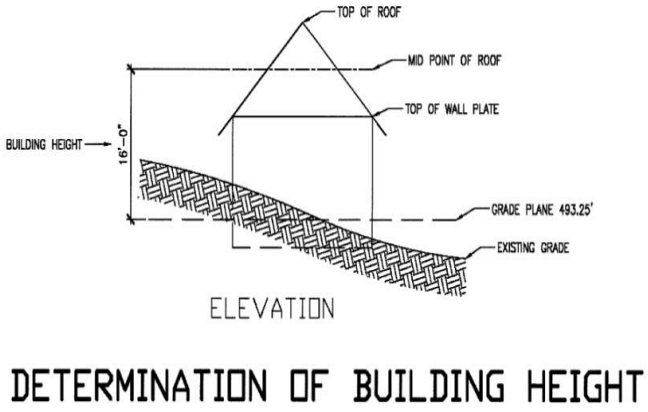
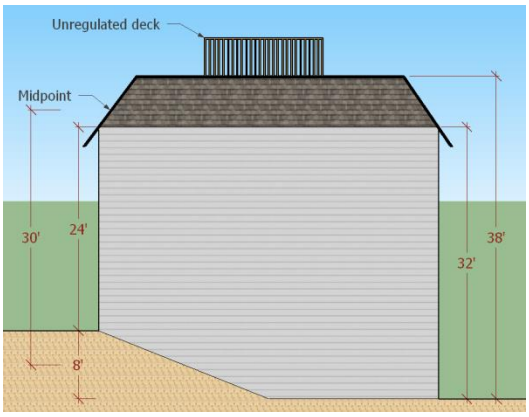
Residential Building Height

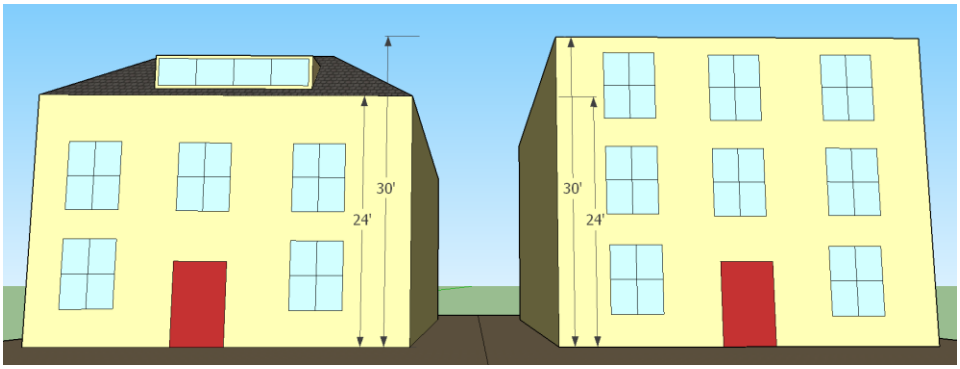
Summary of Issue:

The allowed height for single-family houses is 30 feet but, due to the definition of "building height," recent construction has resulted in houses that are effectively taller than 30 feet. By definition, the current method to determine a building's height is to measure the average height of the highest roof surface from the grade plane (i.e., average grade). Shown below (left side) is a graphic included in the definition of "building height." However, because the definition only applies to roofed structures and a measurement ends at the midpoint of the roof, a building can be much taller than 30 feet as illustrated in the graphic below (right side):





Additionally, when a shallow roof pitch is approved as an alternative to design standards (RMC 4-2-115), the maximum height of 30 feet remains unchanged even though shallow or flat roofs allow facades to be taller, thereby increasing the "mass" of the building (see illustration below).



Issues stemming from existing code and consequent construction of new single family houses include inappropriate structure-massing relative to the existing and desired character of neighborhoods, the loss of views from existing residences, and the loss of direct sunlight on properties adjoining those with structures designed with tall wall elements and shallow or flat roofs.

Staff has developed two options to replace the current definition and manner in which building height is measured for residential structures in the RC through R-14 zones:

1. Limit the number of stories in a house, and the "overall" height measured from the lowest grade, but establish different height limitations based on roof pitch; or
2. Limit the number of stories in a house, and the wall plate height measured from average grade, but only allow additional height for the roof if it's pitched.

Both proposed options limit the number of stories in a building, which would allow a house's first floor to qualify as a "tucked" garage or a daylight basement if the grade exposes no more than 6' of the foundation for more than 50% of the perimeter. The "pros" and "cons" of both options are listed on the following page.

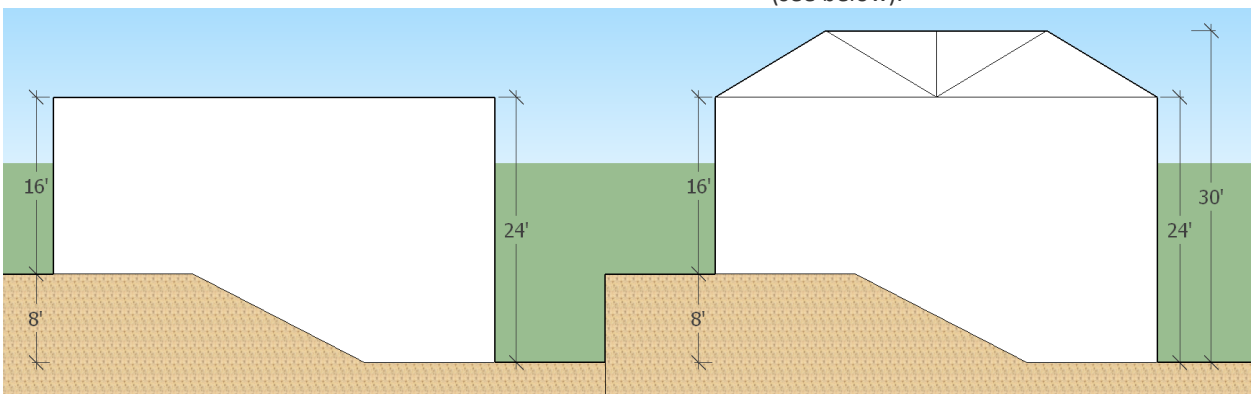
Option #1: Limit houses to two stories and an "overall height limit" of 24' for shallow-roofed houses (less than 4:12 pitch) and 30' for pitched roofs (greater than 4:12), measured from lowest grade:

Pros:

1. Easy to understand
2. Allows wall plates to be uniform height instead of stepping
3. Removes incentive for flat roofs and encourages pitched roofs.

Cons:

1. Applying a maximum floor height might be undesired because of irregularly tall ceilings (e.g., vaulted)
2. Would likely result in split-level homes on sloped lots.
3. Might be too limiting for steeply sloped lots (see below).



Option #2: Limit houses to two stories, limit wall plate height to 24' with an additional 6' for the roof (if it's pitched at 4:12 or greater), measured from average grade.

Pros:

1. Provides flexibility for sloped lots
2. Allows wall plates to be uniform height instead of stepping
3. Removes incentive for flat roofs and encourages pitched roofs
4. Will allow daylight basements and "tucked" garages with favorable slopes (10'-12' grade range as opposed to only 6' with current code).
5. Can *reasonably expect* an overall effective height no greater than 36' based on a 12' grade difference.

Cons:

1. Portions of buildings on the low side of a slope can have facades taller than 24'.